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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,369	08/25/2003	Masanobu Yamamoto	FY.50687US0A	2162

20995 7590 04/24/2007

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EXAMINER	
YEAGLEY, DANIEL S	
ART UNIT	**PAPER NUMBER**
3611	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/24/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/24/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
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Office Action Summary	Application No.	Applicant(s)	
	10/647,369	YAMAMOTO, MASANOBU	
	Examiner	Art Unit	
	Daniel Yeagley	3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *1/29/07*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,14-19 and 22-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,14-19 and 22-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4 – 7, 10, 15, 18, 19, 23 – 25 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuda et al '089.

Matsuda shows a vehicle having a body, saddle-riding seat, steering assembly, drive system and an internal combustion engine E having a crankshaft 26 extending along a first axis mounted in a crankcase Ck (figure 3), a transmission coupled with the drive system (figure 1), and a coupling system for coupling the engine to the transmission that comprises a drive member 26A coupled with the crankshaft and is permanently meshed with a driven member 1A and configured to always rotate at the same speed, wherein the driven member is located along the first axis and coupled with the transmission and is rotatably supported by the crankcase (paragraph 46), such that the coupling system is located generally within the crankcase and the driven member is directly supported at a first and second end in the crankcase with bearings 2 and 5.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al '089.

Matsuda; as stated above, disclosed a coupling means having a driven member that includes a plurality of blades (spine teeth) that extend radially outward and configured to mate with a plurality of drive blades (spline teeth) that extend radially inward, Matsuda therefore discloses the claimed invention except for the reversal of the drive blades extending radially outward and the driven blades extending radially inward.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the coupling system of Matsuda and alternatively switch the order of the coupling members which utilizes a different form having essentially the same characteristics, wherein the blades of the driven and drive members of the coupling system are simply oriented in a reverse order, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art (In re Einstein, 8 USPQ 167) and is considered to be an obvious variation that would only be a matter of design choice and would work equally as well.

5. 1, 4 – 10, 15 – 19 and 22 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw '275 in view of Matsuda et al '089.

Shaw discloses a vehicle having a body, saddle-riding seat, steering assembly coupled with one or more skis and includes an engine and a transmission coupled with a drive system (figure 1), wherein the drive system comprising a drive track as claimed but failed to show the engine crankshaft extending along a first axis mounted in a crankcase with a coupling system having a drive member coupled with the crankshaft and permanently meshed with a driven member configured to always rotate at the same speed within the crankcase with bearings.

Matsuda; as stated above, disclosed an engine crankshaft extending along a first axis mounted in a crankcase with a coupling system having a drive member with a plurality of blades coupled with the crankshaft and permanently meshed with a driven member having a plurality of blades configured to always rotate at the same speed within the crankcase with bearings.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the drive system of Shaw vehicle with an alternative drive system utilizing an coupling system within the crankcase of the engine, in order to provide a more compact engine and drive system as suggested by Matsuda (paragraph 14).

6. Claims 2, 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw '275 as modified by Matsuda '089 in further view of Barthruff '279.

Shaw as modified by Matsuda disclosed a vehicle with a coupling system having the drive and driven member being mounted within the crankcase of the engine as claimed, but failed to show a coupling means comprising a damper portion with at least one cushioning

member located between the drive member and the driven member, wherein the driven member covers the drive member and the damper portion.

Barthruff discloses an coupling system for an internal combustion engine which incorporates a coupling means that is located generally within a casing (figure 1) which shows the prior art of a drive member 31 being coupled to a driven member 21 of the drive system by a dampening means 34, wherein the driven member covers the damper portion 34 and the drive member and are supported by the casing by bearings.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the vehicle of Shaw as modified by the coupling drive assembly of Matsuda with an additional dampening means between the drive and driven members of the coupling system as suggested by Barthruff for enhancing the coupling means with a shock absorbing connection between the coupling members in order to dampen the force between the members during initial rotation of the coupling as taught by Barthruff.

Response to Arguments

7. Applicant's arguments filed 1/29/07 have been fully considered but they are not persuasive. Matsuda clearly shows a drive member and a driven member being located along an axis and are coupled to crankshaft and a transmission, such that the driven member 1 is coupled to a transmission and is rotatably supported by the crankcase, as clearly shown in figures 3 – 6 and the driven member 1 is shown in figure 3 being coupled a drive member at numeral 26 in a permanently meshed state via a spine coupling arrangement and would rotate at the same speed as the drive member as claimed. In response to applicants' argument s that the mounting hole

26A of Matsuda coupling system can not be considered a drive member is not persuasive because the coupling drive member (i.e.; the sleeved portion at 26A of Matsuda is coupled; in this case, monolithically or integrally to the crankshaft 26; as shown in figure 3, and therefore is readable alone on the claim as broadly recited, further Matsuda also shows in figure 6 wherein a coupling arrangement comprises a drive member being coupled to the crankshaft 26 using a separate element rather than an integral connected element and argumentative it is held that constructing an integral structure in various elements involves only routine skill in the art (Nerwin v. Erlichman, 168 USPQ 177, 179) and therefore would have been an obvious alternative.

In response to applicants argument that the reversal of the coupling arrangement between the drive member and the driven member would teach away from Matsuda is not persuasive because it is not deemed that a mere reversal of the splined coupling arrangement between the drive member and the driven member being that the drive member at numeral 26A would be the male portion with the radially outward extending drive blades rather than the female portion and the driven member would be the female portion with inward extending driven blades of the splined connection rather than the male portion without increasing or deceasing the overall diameter of the coupling between the two elements would not require any modification of the crankshaft 26 or the engine crankcase and would not teach away from Matsuda as argued but would merely be a reversal of essential working parts in the level of ordinary skill which is an obvious variation to one ordinary skilled in the art.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Yeagley whose telephone number is (571)-272-6655. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on (571) - 272 - 6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D.Y.

Lesley D Morris

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